

Immersion cryoanaesthesia: A low-cost, easy-to-do technique to reduce pain during injections into digits



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THERAPEUTIC CHALLENGE

Because of rich sensory innervation, any injection into the digits is a singularly unpleasant experience for patients (eg, injection of lidocaine for local anaesthesia; the measles, mumps, and rubella (MMR) vaccine¹; or purified protein derivative for warts on the digits).

SOLUTION

An unopened bottle of normal saline was kept in the chiller tray of the refrigerator for 2 hours. We aimed to inject MMR vaccine into the verrucae on the patient's fingers. We explained the procedure to the patient and elicited a thorough history to rule out cold intolerance, Raynaud phenomenon, and chilblains. The fingers (to be injected) were thoroughly cleaned with running water, povidone-iodine, and alcohol and then placed in a sterile tray, after which cold saline was poured (Fig 1). We waited for 20 seconds, and after ensuring analgesia (ascertained by means of pin prick), we injected MMR vaccine (in this case) into the warts on the immersed hand. We kept a bowl of warm sterile water ready just in case of unexpected Raynaud phenomenon. The patient tolerated the procedure well and agreed that it was a significantly more pleasant experience than his previous MMR vaccine injection sessions were.

For injections into the toes, a slightly larger tray may be used in the same manner as we have described. The quantity of saline used (half a pint in our case) may be further reduced by reducing the size of the container.



Fig 1. Verruca vulgaris on the fingers. The MMR is being injected into the verruca after immersion in chilled saline.

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